Bruhat Bangalore Mahanagara Palike

Executive Engineer

Bytarayanapura Division

QUALITY REPORT

(11th & Part Bill)

Name of Work : PACKAGE NO-6 (CONSIST OF 14 WORKS)

Est. Cost: 1500.00 LAKHS
Job Code: 009-23-000003

MECADEZ
Insight Makes It Happen

Mecadez Core Technologies Private limited
Project Management Consultancy Services

Registered Office: No.80, Aniketana,14th 'B' Main, West of Chord Road, 2nd Stage, 2nd Phase, Mahalakshmipuram, Bengaluru-560086
Ph: - +91-9538136111 +91-9483561234
E-mail: mecadez@gmail.com

Mecadez Core Technologies Private Limited

Project Management Consultancy Services

Summary of Frequencies of Field Tests and Lab Tests Conducted

Name of the work: **Package No.06 Consists of 14 Works**

Job No: **MCTPL/BBMP/EE/BTP/PMC/P-3877/2022-23/QR**

Contractor **M/s SMLP Asphalts, Prop. Sri B B Umesha,**

Sl. No	Particulars of the Tests	Plain Cement Concrete (1:3:6)			
		Quantity Cum	Frequency of Tests	Tests Required	Tests Carried Out
I	**Cement**	152.93	OPC 43 Grade		
1	Consistency test		1Test / Source of Supply	1	1
2	Fineness test		1Test / Source of Supply	1	1
3	Soundness test		1Test / Source of Supply	1	1
4	Compressive strength test				
i	7-days		1Test / Source of Supply	1	1
ii	28-days		1Test / Source of Supply	1	1
II	**Fine Aggregates**				
5	Gradation test		1Test / Day	1	1
III	**Coarse aggregates**				
6	Gradation test		1Test / Day	1	1
7	Water absorption test		Regular Intervals	1	1
8	Impact test		1Test / Source of Supply	1	1

Note: Frequency of tests as per Specifications MORT&H, V Revision, Section 900.

Mecadez Core Technologies Private Limited MECADEZ

Consultant

Contractor

ASSISTANT ENGINEER

ASSISTANT EXECUTIVE ENGINEER

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

Test Report
Consistency test

Project Name	Package No.06 Consists of 14 Works
Client	Excecutive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/P-3877/2022-23/QR
Mix Type	Plain Cement Concrete (1:3:6)
Contractor	M/s SMLP Asphalts, Prop. Sri B B Umesha,
Test Method	IS : 4031 (Part 5) -1988 & Specification for Road & Bridge Works, MORT&H, Rev-V.
Location	Source of Material
Material	Cement
Sample No	1
Sample Collection Date	5/Nov/2022
Testing Date	6-Nov-2022

Sl. No.	Description	Trial 1	Trial 2	Trial 3	Trial 4	Trial 5
1	Weight of Cement	400	400	400	400	400
2	Percentage of water added (%)	27	28.5	29.5	30	31
3	Weight of Water (gm)	108	114	118	120	124
4	Initial Reading of Plunger (mm)	40	40	40	40	40
5	Difference (mm)	22	18	15	16	5

Results: Standard Consistency of Cement: 31.00%

Note:

i. The results indicated above are based on the tests carried out on the sample at site.
ii. The results relate only to the items tested.
iii. This test report should not be reproduced except in full, without written approval of this laboratory.
iv. Any query regarding the report must be reported immediately.

For Mecadez Core Technologies Private Limited

Mecadez Core Technologies Private Limited

Authorised Signature

283 DR-09

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

Test Report
Fineness test

Project Name	Package No.06 Consists of 14 Works
Client	Excecutive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/P-3877/2022-23/QR
Mix Type	Plain Cement Concrete (1:3:6)
Contractor	M/s SMLP Asphalts, Prop. Sri B B Umesha,
Test Method	IS : 4031 (Part 5) -1988 & Specification for Road & Bridge Works, MORT&H, Rev-V.
Location	Source of Material
Material	Cement
Sample No	1
Sample Collection Date	5/Nov/2022
Testing Date	6-Nov-2022

Sl. No.	Determination	Trial 1	Trial 2
1	Weight of Cement before sieve (gm)	100	100
2	Weight of residue retained on 90um sieve (gm)	6.4	5.4
3	Percentage retained (%)	6.4	5.4
4	Average Percentage retained (%)	5.90	

Results: Residue of cement is: 5.90 %

Comments: Maximum allowable residue by mass for ordinary portlad cement is 10%

Note:

i. The results indicated above are based on the tests carried out on the sample at site.
ii. The results relate only to the items tested.
iii. This test report should not be reproduced except in full, without written approval of this laboratory.
iv. Any query regarding the report must be reported immediately.

For Mecadez Core Technologies Private Limited

Mecadez Core Technologies Private Limited MECADEZ

Authorised Signature

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

Q83 : AK-09

Test Report
Soundness test

Project Name	Package No.06 Consists of 14 Works
Client	Excecutive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/P-3877/2022-23/QR
Mix Type	Plain Cement Concrete (1:3:6)
Contractor	M/s SMLP Asphalts, Prop. Sri B B Umesha,
Test Method	IS : 4031 (Part 3) -1988 & Specification for Road & Bridge Works, MORT&H, Rev-V.
Location	Source of Material
Material	Cement
Sample No	1
Sample Collection Date	5/Nov/2022
Testing Date	6-Nov-2022

Sl. No.	Description	Trial 1	Trial 2	Trial 3
1	Initial Distance between the indicator points of Lechatelier mould	11	10	11
2	Final Distance between the indicator points of Lechatelier mould	19	14	17
3	Difference or expansion	8	4	6
4	Average Differences or Expansion in mm		6.00	

Results: Difference in Expansion of Cement: 6.00 mm
Comments: Maximum allowable Expansion of cement is 10 mm.

Note:

i. The results indicated above are based on the tests carried out on the sample at site.
ii. The results relate only to the items tested.
iii. This test report should not be reproduced except in full, without written approval of this laboratory.
iv. Any query regarding the report must be reported immediately.

For Mecadez Core Technologies Private Limited

Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

23.11.22

Test Report
Compressive strength test

Project Name	Package No.06 Consists of 14 Works
Client	Excecutive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/P-3877/2022-23/QR
Mix Type	Plain Cement Concrete (1:3:6)
Contractor	M/s SMLP Asphalts, Prop. Sri B B Umesha,
Test Method	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Source of Material
Material	Cement
Sample No	1
Casting Date	10/Nov/2022
Testing Date	17-Nov-2022

Cube	Cement Grade	Age at Test (Days)	Slump (mm)	Weight (kg)	Dimension (LxWxH)	Density (kg/m3)	Max. Load (KN)	Area (mm2)	Compressive Strength (N/mm2)	Average Sample (N/mm2)
1	43	7	-	0.823	70.6x70.6x70.6	2302	176	4984.36	35.31	34.51
2	43	7	-	0.81	70.6x70.6x70.6	2415	168	4984.36	33.71	

Results: 7-days Compressive strength of cement is 34.51 N/mm^2

Comments: 7-days Compressive strength of cement should not be less than 33 N/mm^2

Note:

i. The results indicated above are based on the tests carried out on the sample at site.

ii. The results relate only to the items tested.

iii. This test report should not be reproduced except in full, without written approval of this laboratory.

iv.Any query regarding the report must be reported immediately.

For Mecadez Core Technologies Private Limited

Core Technologies Private Limited MECADEZ

Authorised Signature

ATE-09

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

Test Report
Compressive strength test

Project Name	Package No.06 Consists of 14 Works
Client	Excecutive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/P-3877/2022-23/QR
Mix Type	Plain Cement Concrete (1:3:6)
Contractor	M/s SMLP Asphalts, Prop. Sri B B Umesha,
Test Method	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Source of Material
Material	Cement
Sample No	1
Casting Date	10/Nov/2022
Testing Date	8-Dec-2022

Cube	Cement Grade	Age at Test (Days)	Slump (mm)	Weight (kg)	Dimension (LxWxH)	Density (kg/m3)	Max. Load (KN)	Area (mm2)	Compressive Strength (N/mm2)	Average Sample (N/mm2)
1	43	28	-	0.897	70.6x70.6x70.6	2287.00	219	4984.36	43.94	44.24
2	43	28	-	0.893	70.6x70.6x70.6	2316.00	222	4984.36	44.54	

Results: 28-days Compressive strength of cement is 44.24N/mm^2

Comments: 28-days Compressive strength of cement should not be less than 43 N/mm^2

Note:

i. The results indicated above are based on the tests carried out on the sample at site.
ii. The results relate only to the items tested.
iii. This test report should not be reproduced except in full, without written approval of this laboratory.
iv. Any query regarding the report must be reported immediately.

For Mecadez Core Technologies Private Limited

Authorised Signature

8.12.22

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

Test Report
Gradation test

Project Name	Package No.06 Consists of 14 Works
Client	Excecutive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/P-3877/2022-23/QR
Mix Type	Plain Cement Concrete (1:3:6)
Contractor	M/s SMLP Asphalts, Prop. Sri B B Umesha,
Test Method	IS : 2386 (Part - 1) 1963 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Source of Material
Material	Fine Aggregates
Sample No	1
Sample Collection Date	5/Nov/2022
Testing Date	7-Nov-2022

Weight of Sample(gram): 200

Sl No.	IS Sieve Size	Weight retained	% retained	% Cumulative	Cumulative % of Passing		Remarks
					% Passing	Gradation limits	
1	10 mm	0	0.00	0.00	100.00	100	Gradation satisfies the MORT&H Zone ll Specification for PCC
2	4.75 mm	15.24	7.62	7.62	92.38	90-100	
3	2.36 mm	15	7.50	15.12	84.88	75-100	
4	1.18 mm	32	16.00	31.12	68.88	55-90	
5	600 µ	51	25.50	56.62	43.38	35-59	
6	300 µ	60	30.00	86.62	13.38	8-30	
7	150 µ	22	11.00	97.62	2.38	0-10	

Note:

i. The results indicated above are based on the tests carried out on the sample at site.
ii. The results relate only to the items tested.
iii. This test report should not be reproduced except in full, without written approval of this laboratory.
iv. Any query regarding the report must be reported immediately.

For Mecadez Core Technologies Private Limited

Mecadez Core Technologies Private Limited MECADEZ

Authorised Signature

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

AB-09

Test Report
Gradation test

Project Name	Package No.06 Consists of 14 Works
Client	Exceeutive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/P-3877/2022-23/QR
Mix Type	Plain Cement Concrete (1:3:6)
Contractor	M/s SMLP Asphalts, Prop. Sri B B Umesha,
Test Method	IS : 2386 (Part - 1) 1963 & Specification for Road & Bridge Works, MORT&H, Rev.
Location	Source of Material
Material	Coarse aggregates
Sample No	1
Sample Collection Date	5/Nov/2022
Testing Date	7-Nov-2022

Weight of Sample: 4000 gms

Sl. No	I.S. Sieve size	Weight Retained (gm)	Percentage of weight Retained (%)	Cumulative Percentage of weight retained (%)	Cumulative % of Passing		Remarks
					Test Result	Gradation Limits as per MORT&H	
1	31.50	0	0.00	0.00	100.00	100	
2	26.50	378	9.45	9.45	90.55	85-95	
3	19.00	435	10.88	20.33	79.68	68-88	
4	9.50	756	18.90	39.23	60.78	45-65	
5	4.75	630	15.75	54.98	45.03	30-55	
6	0.60	850	21.25	76.23	23.78	8-30	
7	0.15	561	14.03	90.25	9.75	5-15	
8	0.08	304	7.60	97.85	2.15	0-5	

Note:

i. The results indicated above are based on the tests carried out on the sample at site.
ii. The results relate only to the items tested.
iii. This test report should not be reproduced except in full, without written approval of this laboratory.
iv. Any query regarding the report must be reported immediately.

For Mecadez Core Technologies Private Limited

Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

23/ATB-09

Test Report
Water absorption test

Project Name	Package No.06 Consists of 14 Works
Client	Excecutive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/P-3877/2022-23/QR
Mix Type	Plain Cement Concrete (1:3:6)
Contractor	M/s SMLP Asphalts, Prop. Sri B B Umesha,
Test Method	IS : 2386 (Part - 3) 1963 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Source of Material
Material	Coarse aggregates
Sample No	1
Sample Collection Date	5/Nov/2022
Testing Date	7-Nov-2022

Sl. No.	Particulars	Computations	Test Numbers		Mean
			Test 1	Test 2	
1	Weight of SSD sample	W_1 g	763	763	
2	Wt of Basket Filled with Aggregates Immersed in water	W_2g	2046	2074	
3	Weight of Saturated Aggregate in water	W_sg = W_2- W_1	1283	1311	
4	Weight of saturated surface dry aggregate in Air	W_3 g	2081	2099	
5	Weight of water equal to the Volume of the Aggregate	W_3- W_s	798	788	
6	Weight of Oven dried Aggregate	W_4g	2042	2065	
7	Specific Gravity	$W_4/(W_3- W_s)$	2.56	2.62	2.59
8	Apparent Specific Gravity	$W_4/(W_4- W_s)$	2.69	2.74	2.71
9	Water Absorption	$(W_4- W_3)*100/ W_4$	1.91	1.65	1.78

Comments: Maximum allowable Aggregate Water Absorption value is 2.0%.

Note:

i. The results indicated above are based on the tests carried out on the sample at site.
ii. The results relate only to the items tested.
iii. This test report should not be reproduced except in full, without written approval of this laboratory.
iv. Any query regarding the report must be reported immediately.

For Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

Test Report
Impact test

Project Name	Package No.06 Consists of 14 Works
Client	Excecutive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/P-3877/2022-23/QR
Mix Type	Plain Cement Concrete (1:3:6)
Contractor	M/s SMLP Asphalts, Prop. Sri B B Umesha,
Test Method	IS : 2386 (Part - 4) 1963 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Source of Material
Material	Coarse aggregates
Sample No	1
Sample Collection Date	5/Nov/2022
Testing Date	7-Nov-2022

Sl. No.	Determination	Unit	Trails	
1	Weight of empty cylinder, w1	gm	960	960
2	Weight of container filled with Aggregate, w2	gm	1268	1288
3	Weight of the Aggregate before compaction, (w2 - w1) = w3	gm	308	328
4	Weight of the sample passing through 2.36 mm IS sieves after Impact, w4	gm	92	90
5	Weight of the sample retained on 2.36 mm IS sieve after Impact, w5	gm	216	238
6	Aggregate Impact Value (w4 / w3)x100	%	29.87	27.44
7	Specified Limit	%	45.00	

Results: Average Aggregate Impact Value: **28.65** %

Note:

i. The results indicated above are based on the tests carried out on the sample at site.

ii. The results relate only to the items tested.

iii. This test report should not be reproduced except in full, without written approval of this laboratory.

iv. Any query regarding the report must be reported immediately.

For Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

8/3
AE-09

Mecadez Core Technologies Private Limited

Project Management Consultancy Services

Summary of Frequencies of Field Tests and Lab Tests Conducted

Name of the work: **Package No.06 Consists of 14 Works**

Job No: **MCTPL/BBMP/EE/BTP/PMC/P-3877/2022-23/QR**

Contractor **M/s SMLP Asphalts, Prop. Sri B B Umesha,**

Sl. No	Particulars of the Tests	M20 Concrete For Drain Raft			
		Quantity Cum	Frequency of Tests	Tests Required	Tests Carried Out
IV	**Concrete**				
1	Compressive strength test	136.50	1 to 5cum=1 sample 6 to 15 cum=2 sample 16 to 30cum=3 smaple 31 to 50cum= 4 sample 51cum and above= one additonal sample for every additional 50 cum or part therof	6	6
	7-days				
	28-days				

Note: Frequency of tests as per Specifications MORT&H, V Revision, Section 900.

Mecadez Core Technologies Private Limited

contractor

ASSISTANT ENGINEER

ASSISTANT EXE

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

Test Report
Concrete Compressive strength

Project Name	Package No.06 Consists of 14 Works
Client	Excecutive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/P-3877/2022-23/QR
Mix Type	M20 Concrete For Drain Raft
Contractor	M/s SMLP Asphalts, Prop. Sri B B Umesha,
Test Method	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Laboratory
Material	Concrete
Sample No	1
Casting Date	17-Nov-2022
Tested Date	24-Nov-2022

Cube	Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Strength (N/mm2)
1	20	7	8.14	150*150*150	2411.85	330.00	0.0225	14.67	14.70	14.56
2	20	7	8.21	150*150*150	2432.59	336.00	0.0225	14.93		
3	20	7	8.23	150*150*150	2438.52	326.00	0.0225	14.49		
4	20	7	8.15	150*150*150	2414.81	321.00	0.0225	14.27	14.41	
5	20	7	8.31	150*150*150	2462.22	328.00	0.0225	14.58		
6	20	7	8.34	150*150*150	2471.11	324.00	0.0225	14.40		

Results: 7-days Compressive strength of Concrete is 14.56 N/mm2

Comments: 7-days Compressive strength of M20 Concrete should not be less than 14 N/mm2

Note:

i. The results indicated above are based on the tests carried out on the sample at site.

ii. The results relate only to the items tested.

iii. This test report should not be reproduced except in full, without written approval of this laboratory.

iv. Any query regarding the report must be reported immediately.

Mecadez Core Technologies Private Limited

Authorised Signature

24-12-09

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

Test Report
Concrete Compressive strength

Project Name	Package No.06 Consists of 14 Works
Client	Excecutive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/P-3877/2022-23/QR
Mix Type	M20 Concrete For Drain Raft
Contractor	M/s SMLP Asphalts, Prop. Sri B B Umesha,
Test Method	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Laboratory
Material	Concrete
Sample No	2
Casting Date	17-Nov-2022
Tested Date	24-Nov-2022

Cube	Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Strength (N/mm2)
1	20	7	8.08	150*150*150	2394.07	331.00	0.0225	14.71	14.71	14.59
2	20	7	8.11	150*150*150	2402.96	336.00	0.0225	14.93		
3	20	7	8.07	150*150*150	2391.11	326.00	0.0225	14.49		
4	20	7	8.26	150*150*150	2447.41	322.00	0.0225	14.31	14.47	
5	20	7	8.24	150*150*150	2441.48	328.00	0.0225	14.58		
6	20	7	8.17	150*150*150	2420.74	327.00	0.0225	14.53		

Results: 7-days Compressive strength of Concrete is 14.59 N/mm2

Comments: 7-days Compressive strength of M20 Concrete should not be less than 14 N/mm2

Note:

i. The results indicated above are based on the tests carried out on the sample at site.
ii. The results relate only to the items tested.
iii. This test report should not be reproduced except in full, without written approval of this laboratory.
iv. Any query regarding the report must be reported immediately.

Mecadez Core Technologies Private Limited

Authorised Signature

AB-09

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

Test Report
Concrete Compressive strength

Project Name	Package No.06 Consists of 14 Works
Client	Excecutive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/P-3877/2022-23/QR
Mix Type	M20 Concrete For Drain Raft
Contractor	M/s SMLP Asphalts, Prop. Sri B B Umesha,
Test Method	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Laboratory
Material	Concrete
Sample No	3
Casting Date	17-Nov-2022
Tested Date	24-Nov-2022

Cube	Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Strength (N/mm2)
1	20	7	8.17	150*150*150	2420.74	333.00	0.0225	14.80	14.80	14.68
2	20	7	8.20	150*150*150	2429.63	338.00	0.0225	15.02		
3	20	7	8.16	150*150*150	2417.78	328.00	0.0225	14.58		
4	20	7	8.35	150*150*150	2474.07	324.00	0.0225	14.40	14.56	
5	20	7	8.33	150*150*150	2468.15	330.00	0.0225	14.67		
6	20	7	8.26	150*150*150	2447.41	329.00	0.0225	14.62		

Results: 7-days Compressive strength of Concrete is 14.68 N/mm2

Comments: 7-days Compressive strength of M20 Concrete should not be less than 14 N/mm2

Note:

i. The results indicated above are based on the tests carried out on the sample at site.
ii. The results relate only to the items tested.
iii. This test report should not be reproduced except in full, without written approval of this laboratory.
iv. Any query regarding the report must be reported immediately.

Mecadez Core Technologies Private Limited

Mecadez Core Technologies Private Limited

Authorised Signature

AR-09

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

Test Report
Concrete Compressive strength

Project Name	Package No.06 Consists of 14 Works
Client	Excecutive Engineer - Byataravanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/P-3877/2022-23/QR
Mix Type	M20 Concrete For Drain Raft
Contractor	M/s SMLP Asphalts, Prop. Sri B B Umesha,
Test Method	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Laboratory
Material	Concrete
Sample No	4
Casting Date	24-Nov-2022
Tested Date	1-Dec-2022

Cube	Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Strength (N/mm2)
1	20	7	8.27	150*150*150	2450.37	335.00	0.0225	14.89	14.89	14.77
2	20	7	8.30	150*150*150	2459.26	340.00	0.0225	15.11		
3	20	7	8.26	150*150*150	2447.41	330.00	0.0225	14.67		
4	20	7	8.45	150*150*150	2503.70	326.00	0.0225	14.49	14.65	
5	20	7	8.43	150*150*150	2497.78	332.00	0.0225	14.76		
6	20	7	8.36	150*150*150	2477.04	331.00	0.0225	14.71		

Results: 7-days Compressive strength of Concrete is 14.77 N/mm2

Comments: 7-days Compressive strength of M20 Concrete should not be less than 14 N/mm2

Note:

i. The results indicated above are based on the tests carried out on the sample at site.
ii. The results relate only to the items tested.
iii. This test report should not be reproduced except in full, without written approval of this laboratory.
iv. Any query regarding the report must be reported immediately.

Mecadez Core Technologies Private Limited

Authorised Signature

AR-09

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

Test Report
Concrete Compressive strength

Project Name	Package No.06 Consists of 14 Works
Client	Excecutive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/P-3877/2022-23/QR
Mix Type	M20 Concrete For Drain Raft
Contractor	M/s SMLP Asphalts, Prop. Sri B B Umesha,
Test Method	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Laboratory
Material	Concrete
Sample No	5
Casting Date	24-Nov-2022
Tested Date	1-Dec-2022

Cube	Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Strength (N/mm2)
1	20	7	8.36	150*150*150	2477.04	337.00	0.0225	14.98	14.98	14.86
2	20	7	8.39	150*150*150	2485.93	342.00	0.0225	15.20		
3	20	7	8.35	150*150*150	2474.07	332.00	0.0225	14.76		
4	20	7	8.26	150*150*150	2447.41	328.00	0.0225	14.58	14.74	
5	20	7	8.32	150*150*150	2465.19	334.00	0.0225	14.84		
6	20	7	8.19	150*150*150	2426.67	333.00	0.0225	14.80		

Results: 7-days Compressive strength of Concrete is 14.86 N/mm2

Comments: 7-days Compressive strength of M20 Concrete should not be less than 14 N/mm2

Note:

i. The results indicated above are based on the tests carried out on the sample at site.

ii. The results relate only to the items tested.

iii. This test report should not be reproduced except in full, without written approval of this laboratory.

iv. Any query regarding the report must be reported immediately.

Mecadez Core Technologies Private Limited

Mecadez Core Technologies Private Limited MECADEZ

Authorised Signature

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

Test Report
Concrete Compressive strength

Project Name	Package No.06 Consists of 14 Works
Client	Executive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/P-3877/2022-23/QR
Mix Type	M20 Concrete For Drain Raft
Contractor	M/s SMLP Asphalts, Prop. Sri B B Umesha,
Test Method	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Laboratory
Material	Concrete
Sample No	6
Casting Date	24-Nov-2022
Tested Date	1-Dec-2022

Cube	Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Strength
1	20	7	8.46	150*150*150	2506.67	339.00	0.0225	15.07	15.07	14.95
2	20	7	8.49	150*150*150	2515.56	344.00	0.0225	15.29		
3	20	7	8.45	150*150*150	2503.70	334.00	0.0225	14.84		
4	20	7	8.36	150*150*150	2477.04	330.00	0.0225	14.67	14.83	
5	20	7	8.42	150*150*150	2494.81	336.00	0.0225	14.93		
6	20	7	8.29	150*150*150	2456.30	335.00	0.0225	14.89		

Results: 7-days Compressive strength of Concrete is 14.95 N/mm2
Comments: 7-days Compressive strength of M20 Concrete should not be less than 14 N/mm2

Note:

i. The results indicated above are based on the tests carried out on the sample at site.
ii. The results relate only to the items tested.
iii. This test report should not be reproduced except in full, without written approval of this laboratory.
iv. Any query regarding the report must be reported immediately.

Mecadez Core Technologies Private Limited

Mecadez Core Technologies Private Limited MECADEZ

Authorised Signature.

1/12-09

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

Test Report
Concrete Compressive strength

Project Name	Package No.06 Consists of 14 Works
Client	Excecutive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/P-3877/2022-23/QR
Mix Type	M20 Concrete For Drain Raft
Contractor	M/s SMLP Asphalts, Prop. Sri B B Umesha,
Test Method	IS . 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Laboratory
Material	Concrete
Sample No	1
Casting Date	17-Nov-2022
Tested Date	15-Dec-2022

Cube	Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Strength (N/mm2)
1	20	28	8.45	150*150*150	2503.70	451.00	0.0225	20.04	20.34	20.50
2	20	28	8.64	150*150*150	2560.00	455.00	0.0225	20.22		
3	20	28	8.48	150*150*150	2512.59	467.00	0.0225	20.76		
4	20	28	8.63	150*150*150	2557.04	468.00	0.0225	20.80	20.67	
5	20	28	8.59	150*150*150	2545.19	456.00	0.0225	20.27		
6	20	28	8.47	150*150*150	2509.63	471.00	0.0225	20.93		

Results: 28-days Compressive strength of Concrete is 20.50 N/mm2

Comments: 28-days Compressive strength of M20 Concrete should not be less than 20 N/mm2

Note:
i. The results indicated above are based on the tests carried out on the sample at site.
ii. The results relate only to the items tested.
iii. This test report should not be reproduced except in full, without written approval of this laboratory.
iv. Any query regarding the report must be reported immediately.

Mecadez Core Technologies Private Limited

Mecadez Core Technologies Private Limited MECADEZ

Authorised Signature

AB-09

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

Test Report
Concrete Compressive strength

Project Name	Package No.06 Consists of 14 Works
Client	Excecutive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/P-3877/2022-23/QR
Mix Type	M20 Concrete For Drain Raft
Contractor	M/s SMLP Asphalts, Prop. Sri B B Umesha,
Test Method	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Laboratory
Material	Concrete
Sample No	2
Casting Date	17-Nov-2022
Tested Date	15-Dec-2022

Cube	Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Strength (N/mm2)
1	20	28	8.51	150*150*150	2521.48	460.00	0.0225	20.44	20.46	20.39
2	20	28	8.65	150*150*150	2562.96	452.00	0.0225	20.09		
3	20	28	8.58	150*150*150	2542.22	469.00	0.0225	20.84		
4	20	28	8.43	150*150*150	2497.78	459.00	0.0225	20.40	20.33	
5	20	28	8.52	150*150*150	2524.44	450.00	0.0225	20.00		
6	20	28	8.68	150*150*150	2571.85	463.00	0.0225	20.58		

Results: 28-days Compressive strength of Concrete is 20.39 N/mm2

Comments: 28-days Compressive strength of M20 Concrete should not be less than 20 N/mm2

Note:
i. The results indicated above are based on the tests carried out on the sample at site.
ii. The results relate only to the items tested.
iii. This test report should not be reproduced except in full, without written approval of this laboratory.
iv. Any query regarding the report must be reported immediately.

Mecadez Core Technologies Private Limited

Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

Test Report
Concrete Compressive strength

Project Name	Package No.06 Consists of 14 Works
Client	Excecutive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/P-3877/2022-23/QR
Mix Type	M20 Concrete For Drain Raft
Contractor	M/s SMLP Asphalts, Prop. Sri B B Umesha,
Test Method	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Laboratory
Material	Concrete
Sample No	3
Casting Date	17-Nov-2022
Tested Date	15-Dec-2022

Cube	Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Strength (N/mm2)
1	20	28	8.60	150*150*150	2548.15	462.00	0.0225	20.53	20.55	20.48
2	20	28	8.74	150*150*150	2589.63	454.00	0.0225	20.18		
3	20	28	8.67	150*150*150	2568.89	471.00	0.0225	20.93		
4	20	28	8.52	150*150*150	2524.44	461.00	0.0225	20.49	20.41	
5	20	28	8.61	150*150*150	2551.11	452.00	0.0225	20.09		
6	20	28	8.77	150*150*150	2598.52	465.00	0.0225	20.67		

Results: 28-days Compressive strength of Concrete is 20.48 N/mm2

Comments: 28-days Compressive strength of M20 Concrete should not be less than 20 N/mm2

Note:
i. The results indicated above are based on the tests carried out on the sample at site.
ii. The results relate only to the items tested.
iii. This test report should not be reproduced except in full, without written approval of this laboratory.
iv. Any query regarding the report must be reported immediately.

Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

Test Report
Concrete Compressive strength

Project Name	Package No.06 Consists of 14 Works
Client	Excecutive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/P-3877/2022-23/QR
Mix Type	M20 Concrete For Drain Raft
Contractor	M/s SMLP Asphalts, Prop. Sri B B Umesha,
Test Method	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Laboratory
Material	Concrete
Sample No	4
Casting Date	24-Nov-2022
Tested Date	22-Dec-2022

Cube	Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Strength (N/mm2)
1	20	28	8.70	150*150*150	2577.78	464.00	0.0225	20.62	20.64	20.57
2	20	28	8.84	150*150*150	2619.26	456.00	0.0225	20.27		
3	20	28	8.77	150*150*150	2598.52	473.00	0.0225	21.02		
4	20	28	8.62	150*150*150	2554.07	463.00	0.0225	20.58	20.50	
5	20	28	8.71	150*150*150	2580.74	454.00	0.0225	20.18		
6	20	28	8.87	150*150*150	2628.15	467.00	0.0225	20.76		

Results: 28-days Compressive strength of Concrete is 20.57 N/mm2

Comments: 28-days Compressive strength of M20 Concrete should not be less than 20 N/mm2

Note:
i. The results indicated above are based on the tests carried out on the sample at site.
ii. The results relate only to the items tested.
iii. This test report should not be reproduced except in full, without written approval of this laboratory.
iv. Any query regarding the report must be reported immediately.

Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

Test Report
Concrete Compressive strength

Project Name	Package No.06 Consists of 14 Works
Client	Excecutive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/P-3877/2022-23/QR
Mix Type	M20 Concrete For Drain Raft
Contractor	M/s SMLP Asphalts, Prop. Sri B B Umesha,
Test Method	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Laboratory
Material	Concrete
Sample No	5
Casting Date	24-Nov-2022
Tested Date	22-Dec-2022

Cube	Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Strength (N/mm2)
1	20	28	8.79	150*150*150	2604.44	466.00	0.0225	20.71	20.73	20.66
2	20	28	8.93	150*150*150	2645.93	458.00	0.0225	20.36		
3	20	28	8.86	150*150*150	2625.19	475.00	0.0225	21.11		
4	20	28	8.71	150*150*150	2580.74	465.00	0.0225	20.67	20.59	
5	20	28	8.80	150*150*150	2607.41	456.00	0.0225	20.27		
6	20	28	8.96	150*150*150	2654.81	469.00	0.0225	20.84		

Results: 28-days Compressive strength of Concrete is 20.66 N/mm2

Comments: 28-days Compressive strength of M20 Concrete should not be less than 20 N/mm2

Note:

i. The results indicated above are based on the tests carried out on the sample at site.
ii. The results relate only to the items tested.
iii. This test report should not be reproduced except in full, without written approval of this laboratory.
iv. Any query regarding the report must be reported immediately.

Mecadez Core Technologies Private Limited

Authorised Signatory

AB-09

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

Test Report
Concrete Compressive strength

Project Name	Package No 06 Consists of 14 Works
Client	Excecutive Engineer - Byatarayanapura Division
Job No	MCTPL/BBMP/EE/BTP/PMC/P-3877/2022-23/QR
Mix Type	M20 Concrete For Drain Raft
Contractor	M/s SMLP Asphalts, Prop. Sri B B Umesha,
Test Method	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Laboratory
Material	Concrete
Sample No	6
Casting Date	24-Nov-2022
Tested Date	22-Dec-2022

Cube	Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Strength
1	20	28	8.89	150*150*150	2634.07	468.00	0.0225	20.80	20.81	20.75
2	20	28	8.71	150*150*150	2580.74	460.00	0.0225	20.44		
3	20	28	8.96	150*150*150	2654.81	477.00	0.0225	21.20		
4	20	28	8.81	150*150*150	2610.37	467.00	0.0225	20.76	20.68	
5	20	28	8.90	150*150*150	2637.04	458.00	0.0225	20.36		
6	20	28	8.65	150*150*150	2562.96	471.00	0.0225	20.93		

Results: 28-days Compressive strength of Concrete is 20.75 N/mm2

Note:
i. The results indicated above are based on the tests carried out on the sample at site.
ii. The results relate only to the items tested.
iii. This test report should not be reproduced except in full, without written approval of this laboratory.
iv. Any query regarding the report must be reported immediately.

Mecadez Core Technologies Private Limited

Authorised Signature

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97

Mecadez Core Technologies Private Limited

Project Management Consultancy Services

Summary of Frequencies of Field Tests and Lab Tests Conducted

Name of the work: Package No.06 Consists of 14 Works

Job No: MCTPL/BBMP/EE/BTP/PMC//P-3877/2022-23/QR

Contractor M/s SMLP Asphalts, Prop. Sri B B Umesha,

Sl. No	Particulars of the Tests	M20 Concrete For Drain Wall			
		Quantity Cum	Frequency of Tests	Tests Required	Tests Carried Out
IV	Concrete				
I	Compressive strength test				
	7-days	205.77	1 to 5cum=1 sample 6 to 15 cum=2 sample 16 to 30cum=3 smaple 31 to 50cum= 4 sample 51cum and above= one additional sample for every additional 50 cum or part thereof	8	8
	28-days				

Note: Frequency of tests as per Specifications MORT&H, V Revision, Section 900.

Mecadez Core Technologies Private Limited
Engineer

Contractor

ASSISTANT ENGINEER

ASSISTANT E. E

Assistant Executive Engineer
Vidyaranyapura Sub Division
B.B.M.P, Bangalore - 97